Minnesota Pollution Control Agency

SITE INSPECTION PLAN

General Information

Site Name Hader Dump U.S. EPA ID Number MND981961865

Address N.E. Corner of Hwy. 52 & Co. Rd. 8

City Hader State MN Zip 55027

County Goodhue

Site Representative Ray Schoenfelder Title Owner Phone

Plan Prepared By Shawn Ruotsinoja/Byron Adams Date 11-13-87

Plan Approved By Date

Objective (Type of contamination & description of work to be performed):

Municipal wastes and other unknown wastes have been dumped into a quarry pond. The potential of hazardous waste dumping exists as a result of the open-gate policy maintained at the site. Soil boring and sediment collection and analysis is needed. Sampling and testing of domestic wells and quarry pond waters are needed to determine impacts to ground water from past dumping events.

Estimated Date of Investigation 12/87

Initial Site Investigation Site Investigation Follow-Up

Preliminary HRS Score of Routes: GW 17.27 SW 8.39 Air --

Total Preliminary HRS Score 11.10

Projected HRS Score 30.34
(worst case possibility)

Inspection Priority: Low: Medium: X High:

Geophysical Data Available: Yes: No: X

Explain:

Access Agreement Required: Yes: X No:

Site Access arranged by: MPCA staff through Ray Schoenfelder

SITE CHARACTERISTICS

Site/Facility Description (include Drill Rig accessibility) Dirt roads border east side of site and access along the northern side of site is feasible. A majority of wastes have been dumped directly into an old quarry pond that has 5-10' of standing water. Bedrock outcrops along the face of quarry, access to pond is from the north side.

Brief Site History (include past owners) Operated from 1960-73. Proprietor was Oscar Haugen. Dump was closed in 1975; however, dumping continued until 1985. Site is presently owned by Ray Schoenfelder.

Site Status (active, inactive) Inactive, except for alleged illegal dumping, appears to be domestic.

Features of Concern (power lines, public/private utilities, livestock, fences, terrain, etc.) Entrance gate at southeast end. Precaution will need to be taken in sampling in and around quarry, especially quarry sediment and surface waters.

Site Map Description Aerial T111N, R17W, Sect. 36/SW¼, SW¼, SE¼ Leon Township

Site Map Date 4-24-73 Bench Mark on map: Yes ____ No X

Closest Bench Mark Location MN DOT, District 6 (Rochester) (507) 285-7392/ County Surveyor (612) 388-8261 Ext. 146.

Bench Mark Elevation ____

Bench Mark Information Source ____

SITE GEOLOGY

Surface Soil Type (sand, clay, bedrock): Silt loam (loessial) over stone bedrock (Galena).

Wetlands or Surface Waters on Site (Describe): Dump was once a quarry. It now contains water (depth 5'-10') that outlets through bedrock to the north to a tributary of Belle Creek.

Subsurface Stratigraphy

Rock/Soil Type	Thickness	Depth	Saturated/Unsaturated	Contaminated
Loess silt loam Galena DS	10'/20-40'	(msl) 1175	Aquifer in Galena Saturated	?
Decorah Shale Platteville LS	60'/20'	1075 1055	No Aquifer	?
Glenwood Shale St. Peter SS	5'/100'	1050 950	Aquifer - Sat.	?
Shakopee DS Oneota DS			Aquifer - Sat.	?

Primary Aquifer of Concern: Galena DS and St. Peter S.S.

Depth to Ground Water: 30' Recorded Contamination Yes ____ No X

Ground Water Flow Direction: N-NE Surface Water Flow Direction: North

Ground Water Use in Vicinity: Drinking: X Commercial ____

Livestock: X Other: ____

Depth to Bedrock: ≃ 10' Depth of Contamination Soil: unknown

Contamination Type

Soil (Describe): Wastes dumped directly on soils in old quarry, waste characteristics are unknown.

Ground Water (Describe): Upper bedrock is karstified and indirect contact with quarry water. Contamination of upper bedrock aquifers with dump water is likely.

Surface Water (Describe): A tributary of Belle Creek runs out of quarry and could be impacted by dump wastes.

Field Work Required

Zone of Contamination Identified: Yes X No ____

Contamination Zone Outlined on Site Map: Yes X No ____

Soil Sampling Required: Yes X No ____ Surface X Subsurface X

Drilling Required: Yes X No ____

Number of Soil Borings Required: ---

Boring Locations Identified: Yes ____ No ____ Field Determination X

Estimated Soil Borings Depths: Based on visual evidence of contamination.

Estimated Soil Sampling Intervals: NA

Estimated Number of Soil Samples to be Obtained for Site: 8 to 10

Soil Sampling Fractions: VOA X Semi VOA X

Pest/PCB X Metals/Cyanide X Special ____

Summary of Soil Sampling Procedures: About 5 to 6 soil/Aquifer samples will be retained from monitor well borehole drilling operations using a split-spoon method or recovery of drill cuttings from surface. Organic vapor testing, odor, visual observations and borehole location will be used to select soil samples for analysis. Two to three sediment samples will be collected from quarry pond and outlet tributary using hand sampling methods i.e. scoop and trowel, hand auger. Analysis will focus on: pesticides, metals, VOC s and oil and grease (SAS Method 5/023) on quarry pond samples.

Monitor Wells Required: Yes X No ____

Monitor Well Diameter: 2 Inch X 4 Inch ____

Number of Monitor Wells: 2

Number of Monitor Wells Utilizing Soil Boring Location: 2

Depth to Ground Water: 30'

Well Locations Identified: Yes X No ____ Field Determination X

Well Description Included: Yes X No

Water Sampling Fractions: VOA X Semi VOA X

Pest/PCB X Metals/Cyanide X Special X SAS

Initial Well Development Performed by: Contractor X MPCA

Summary of Sampling Procedures: About 6 ground water samples will be taken; two from installed monitoring wells and 4 from residential wells adjacent to the dump. Analysis will focus on: metals, pesticides and VOA's at low concentration analysis, methods 5/029 and 5/030.

2-inch I.D. wells/Estimated depths 30-40 feet.

Stainless steel riser and screens - Waters are corrosive!

Total Number of Soil Samples: 8-10 Blanks: No

Total Number of Ground Water Samples: 6 Blanks: 2

Total Number of Surface Water Samples: 3 Blanks: (2?)

Piezometer(s) Required: Yes: No: X Number of Piezometers Needed:

Piezometer Summary:

Site Investigation Personnel

Team Member	Responsibility
Shawn Ruotsinoja	Project Leader
Byron Adams	Hydrologist
Meri Lapp	Pollution Control Specialist

Drilling Contractor

Name of Firm: Geotechnical Eng. Corp.

Address: 1925 Oakcrest Ave., Roseville, MN

Contact Person Steve Bennett Phone(612) 636-7744

Distance from MPCA Headquarters to Site: 60 miles

Distance from Drilling Contractor to Site: 60 miles

Working Limitations: Limited to daylight hours, cold temperatures and snow cover may limit site access and activities. Monitor for cold stress.

Site Safety Plan Completed: Yes X No

Other Comments: